

Performance Management System

State Highway Administration Quarterly Report July 2017



State of Maryland



A Message From the Governor



"Our administration is committed to developing innovative solutions that deliver what Marylanders want – an affordable and reliable transportation system. By implementing a comprehensive program of accountability and continual improvements, we will deliver a better transportation system for the citizens of Maryland."

"This is another step our administration is taking to Change Maryland for the Better!"

- Larry Hogan, Governor



The Maryland Department of Transportation and its Transportation Business Units proudly present the official mission statement.



MISSION STATEMENT

"The Maryland Department of Transportation is a customer-driven leader that delivers safe, sustainable, intelligent, and exceptional transportation solutions in order to connect our customers to life's opportunities."

A Message From the Secretary

My Fellow Marylanders,

I am proud that the Maryland Department of Transportation Excellerator Performance Management System is in its second year. We have made great strides in developing and implementing performance measures, refining strategies and focusing on delivering results for our customers.

Over the past year, we have created more than 150 individual performance measures that touch every aspect of our business throughout the organization. Whether we are building and maintaining our roads and bridges, running safe and efficient bus and rail systems, operating an international port and airport or improving the vehicle and driver registration process for Marylanders, we stand strong in our commitment and responsibility to deliver the best transportation products and services for our customers.



Pete K. Rahn Secretary

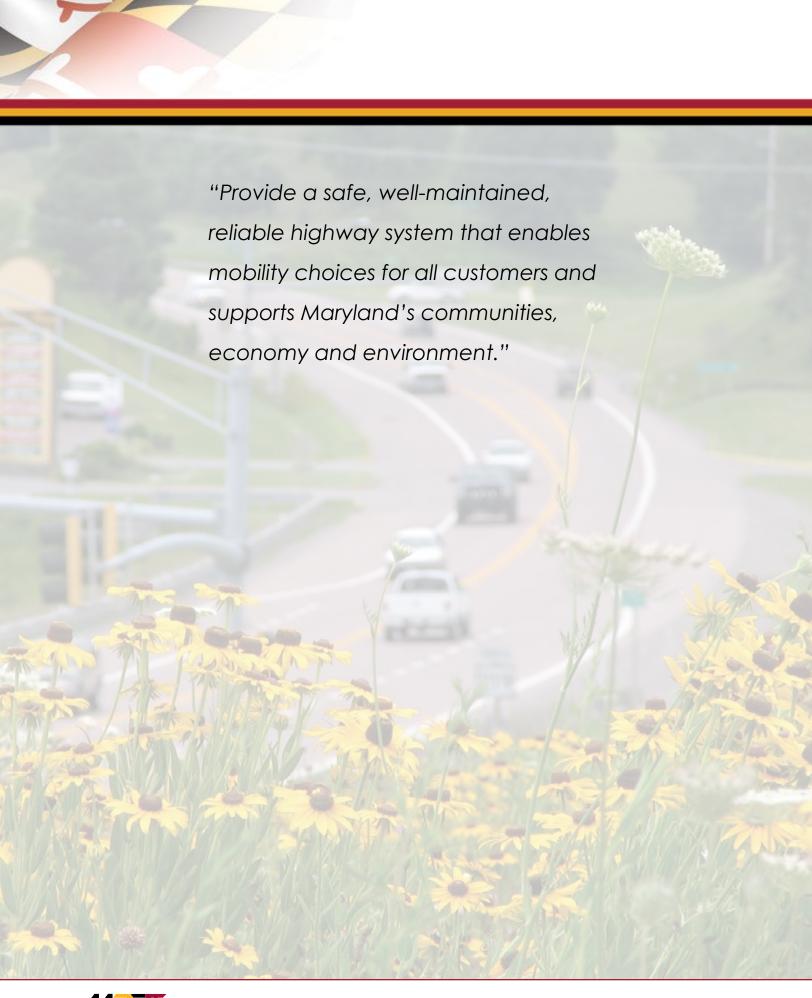
Every quarter we review our progress and share our results online for public inspection and within the organization through a live stream of our quarterly review meeting.

This allows all 11,000 MDOT employees the opportunity to see the impact of the work the

This allows all 11,000 MDOT employees the opportunity to see the impact of the work they do each day and how they contribute to running a safe and secure transportation system.

Most importantly, we are delivering results. As we respond faster to customer inquiries, become increasingly efficient in using our resources wisely and provide a stronger foundation for economic development for the state, we will continue to deliver exceptional customer service and create more value for those who live and travel throughout Maryland.

I invite you to continue to review our MDOT Excellerator program as we continue down the path of constant progress towards outstanding results.



A Message From the Administrator

Dear Valued Customer,

The Maryland Department of Transportation State Highway Administration (MDOT SHA) stands proud of our history rich in excellence and public service. SHA's future will build upon that foundation, harnessing innovation with our collective work ethic to deliver Governor Hogan's Customer Service Promise.

Our focus is and always will be on communication, customer service, innovation and modernization. We will sharpen that focus throughout the organization by keeping the needs of Maryland citizens at the center of every decision we make, every project we build, and every service we provide to the public.

I firmly believe what makes SHA run is not an Administrator. Employees are the key to SHA's success – the people who work hard in every division... every day... throughout the state. My goal is to provide our SHA team with the tools they need to continue to make SHA an agency of "character and consequence." We will promote innovation, implementing the latest technology and creative problem solving.



Gregory Slater *SHA Administrator*

With the MDOT Excellerator as our roadmap, we can make a difference for the future of our state. I assure you we will not be an organization that merely applicates innovative ideas. We will lead and implement them. This collaborative approach will incorporate new and diverse viewpoints and ideas and will guide this organization going forward.

We will continue to listen to our customers, partners and each other, clearly communicating expectations. Our customers need to hear from us with clarity, urgency and most importantly... empathy. We will hold each other accountable in meeting goals and our customer service promise. The good people of Maryland deserve our very best, and we will provide nothing less.



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Please refer to the MDOT wide Quarterly Performance Management Report for more performance measures for each of the 10 Tangible Results across all of the Transportation Business Units.

Performance Measures Index

Tangible Results

Frequency Driver

Tangible Result # 1: Provide Exceptional Customer Service		Scott Pomento, SHA	
SHA 1.1	Number of Dynamic Message Sign (DMS) Travel Alerts Communicated in a Timely Manner	Annually (Jan.)	Joey Sagal, SHA
Tangible I	Result # 2: Use Resources Wisely		Scott Pomento, SHA
SHA 2.1	Average Maintenance Activity Expenditures per Lane-mile	Annually (Jan.)	Russ Yurek/Sandi Sauter, SHA
SHA 2.2	Overall Remaining Service Life (RSL) of the SHA Pavement Network	Annually (Oct.)	Sejal Barot, SHA
SHA 2.3	Percent of Operating Dollars Spent to Budget	Annually (Oct.)	Russ Yurek, SHA
Tangible Result # 3: Provide a Safe and Secure Transportation Infrastructure			Scott Pomento, SHA
SHA 3.1	Annual Number of Temporary Traffic Control (TTC) Zone Traffic Fatalities on All Maryland Roads	Annually (July)	Cedric Ward, SHA
SHA 3.2	Percent of SHA Roadway Lighting Functioning	Annually (Jan.)	Russ Yurek/Sandi Sauter, SHA
SHA 3.3	Percent of Half-mile Segments of Roadway with Guardrail in Acceptable Condition	Annually (Jan.)	Russ Yurek/Sandi Sauter, SHA
SHA 3.4	Amount of Documented Illegal Truck Parking Along Maryland State Roadways	Annually (April)	John Thomas, SHA
Tangible Result # 4: Deliver Transportation Solutions and Services of Great Value		Scott Pomento, SHA	
SHA 4.1	Percent of Projects (Valued at More Than \$1 Million) Advertised Within 30 Days of the Original Established Financial Advertisement Date	Quarterly	Eric Marabello, SHA
SHA 4.2	Percent of Projects (Valued at More Than \$1 Million) with a Bid Opening Date on Target with the Bid Opening Date at Time of Actual Advertisement Date	Quarterly	Eric Marabello, SHA
Tangible Result # 5: Provide An Efficient, Well Connected Transportation Experience		Scott Pomento, SHA	
SHA 5.3	Percent of SHA Signs Functioning (Reflectivity)	Annually (TBD)	Cedric Ward, SHA
SHA 5.4	Percent of Half-mile Segment of Roadway with Line Striping in Acceptable Condition	Annually (Jan.)	Russ Yurek/Sandi Sauter, SHA
SHA 5.5	Percent of Half-mile Segments of Roadway with Pavement Markings in Acceptable Condition	Annually (Jan.)	Russ Yurek/Sandi Sauter, SHA
SHA 5.6	Percent of the Maryland SHA Network in Overall Preferred Maintenance Condition	Annually (Jan.)	Russ Yurek/Sandi Sauter, SHA

Performance Measures Index

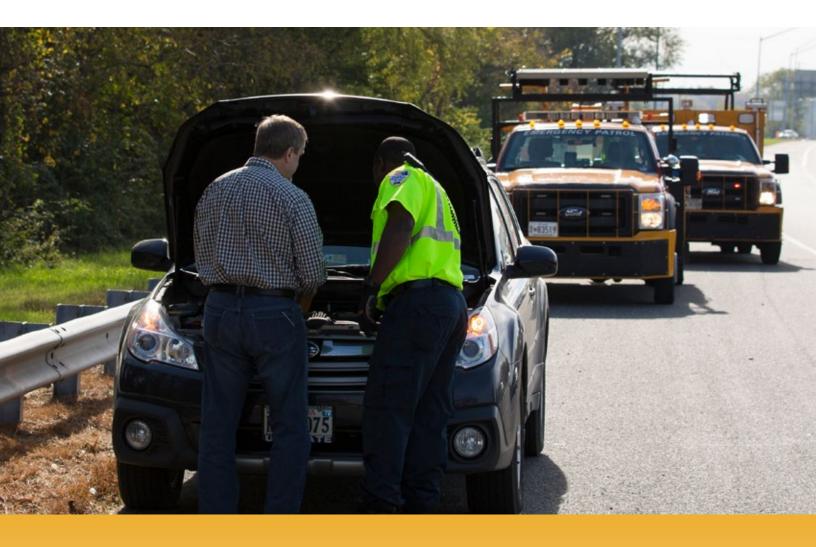
Tangible Results

Frequency Driver

Tangible Result # 7: Be Fair and Reasonable To Our Partners			Scott Pomento, SHA
SHA 7.1	Time to Complete Architectural and Engineering (A/E) Services Contracts	Quarterly	Eric Lomboy, SHA
Tangible Result # 8: Be a Good Neighbor			Scott Pomento, SHA
SHA 8.1	Percent of Half-mile Segments of Roadway with Acceptable Litter Levels	Annually (Jan.)	Russ Yurek/Sandi Sauter, SHA
SHA 8.2	Percent of Half-mile Segments of Roadway with Acceptable Mowing	Annually (Jan.)	Russ Yurek/Sandi Sauter, SHA
Tangible Result # 9: Be a Good Steward of Our Environment			Scott Pomento, SHA
SHA 9.1	Percent of Impervious Restoration Completed Annually	Annually (Oct.)	Sonal Ram, SHA
Tangible Result # 10: Facilitate Economic Opportunity in Maryland			Scott Pomento, SHA
SHA 10.1	Number of Qualifying Superload Permits Up to and including 200,000 Pounds Issued Within Two Business Days of Receiving a Correct Application in the new Maryland One Hauling Permit System	Quarterly	Dave Czorapinski, SHA

TANGIBLE RESULT #1

Provide Exceptional Customer Service



Every MDOT employee is responsible for delivering exceptional customer service by providing customers with respectful, timely and knowledgeable responses to all inquiries and interactions.

RESULT DRIVER:

Leslie Dews

Motor Vehicle Administration (MVA)

Provide Exceptional Customer Service

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Joseph Sagal

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To enhance customer service with DMS messaging to better inform the traveling public with timely information.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Analysis of data from the CHART Advanced Transportation Management System.

NATIONAL BENCHMARK:

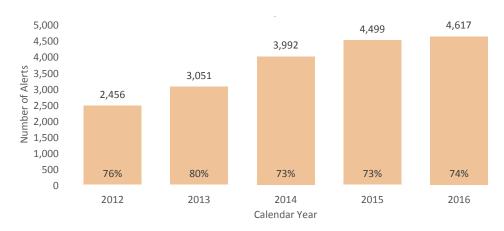
N/A

PERFORMANCE MEASURE SHA 1.1

Percent of Dynamic Message Sign (DMS) Travel Alerts Communicated in a Timely Manner

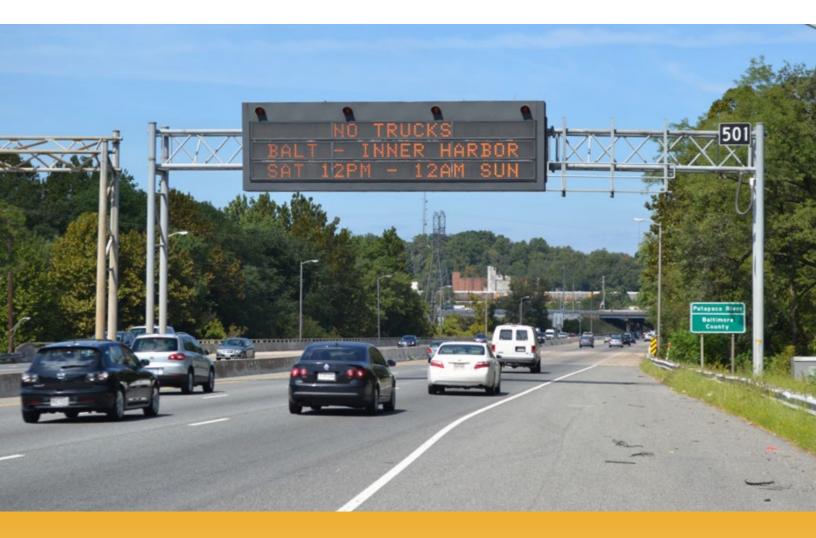
Communicating real time information to the traveling public is important to ensure customers have the information they need in a timely manner to make wise decisions while traveling on Maryland roadways. Dynamic message signs provide information about changing highway conditions to improve operations, reduce accidents, and inform travelers.

Chart 1.1.1: Percent of Timely DMS Alerts CY2012-CY2016



TANGIBLE RESULT #2

Use Resources Wisely



MDOT receives resources from customers and they expect products and services in return. To better serve customers, MDOT must maximize the value of every dollar we spent.

RESULT DRIVER:

Corey Stottlemyer
The Secretary's Office (TSO)

Use Resources Wisely

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Russ Yurek/Sandi Sauter State Highway Administration (SHA)

PURPOSE OF MEASURE:

To determine how well SHA uses available funding to sustain or improve the level of service on maintenance activities as an indicator of how efficiently roadway facilities are maintained.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Maintenance activity expenditures per lane mile of roadway is maintained through the Financial Management Information System (FMIS).

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE SHA 2.1

Average Maintenance Activity Expenditures Per Lane Mile

Maximizing the use of resources for maintenance activities enables SHA to fund other projects and programs, providing more goods and services to the traveling public. Maintenance activities include the following: sign maintenance, pavement markings, line striping, guardrail maintenance, lighting, brush and tree trimming, mowing, ditching, litter removal, culverts and inlets maintenance, roadside grading, debris removal. underdrain, other roadside and drainage activities, curb and gutter, delineators, erosion control, and slope maintenance. The statewide trend shows a modest unit cost increase consistent with increased costs in labor, material and contract resources.

Chart 2.1.1: Maintenance Activity Expenditures per Lane Mile FY2012-FY2016



Use Resources Wisely

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Sejal Barot

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To quantify the overall pavement condition.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Overall RSL of each pavement section is the lowest of the individual RSLs for ride quality, cracking, rutting, and friction and is reflected in years remaining. Individual pavement section RSLs are rolled into a network-wide average. The performance trend of the pavement is controlled in this situation by cracking data, which has the least mature and most technically difficult collection and processing technology, which leads to a higher variance of statistical error. SHA collects this data using road scanning technology that captures pavement condition information.

NATIONAL BENCHMARK:

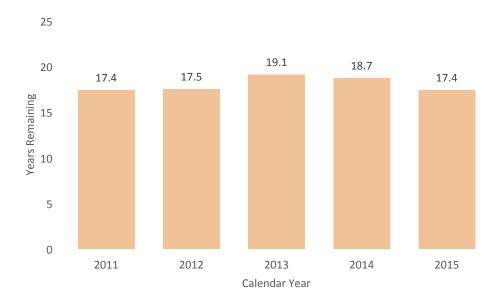
N/A

PERFORMANCE MEASURE SHA 2.2

Overall Remaining Service Life (RSL) of the SHA Pavement Network

The overall pavement condition, in terms of Remaining Service Life (RSL), is a measure that helps SHA understand when there is a need to repave the roadway. Repaving is important for safety and the ride quality customers experience, but using RSL also helps identify the optimal time to invest in repaving before a repaving project may become a more significant overhaul of the roadway. To be efficient in maintenance and state of good repair work of the roadways system, SHA engages in strategic planning of the roadway resurfacing system preservation fund annually to inform SHA Districts on where to make repairs and the type of repairs that maximize the return on investment. This work relies on a stable system preservation funding stream. Continuous improvement of strategic planning and implementation is ongoing, and innovative treatments are being implemented to target asphalt cracking deterioration and low friction.

Chart 2.2.1: Overall Remaining Service Life (RSL) of the SHA Pavement
Network CY2011-CY2015



Use Resources Wisely

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Russ Yurek

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track the efficiency of spending in SHA's operating program.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY:

Track operating program spending versus the total budget for SHA's operating programs.

NATIONAL BENCHMARK:

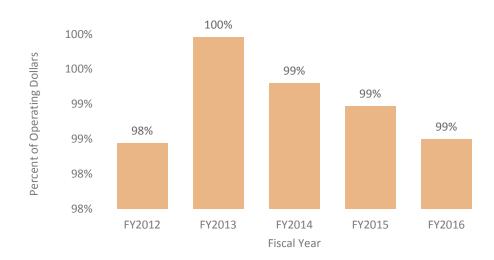
N/A

PERFORMANCE MEASURE SHA 2.3

Percent of Operating Dollars Spent to Budget

SHA monitors the efficiency of spending in operating programs. This is important to customers so they can see how well public funds are used in the operation of the transportation system. Data is from the State System Maintenance Program and the Highway Safety Operating Program. SHA has achieved an acceptable level (at or below 1 percent of the annual amended appropriation) of performance for each of the fiscal years shown. Currently, there are no interventions, strategic action plans, or improvements necessary to this process; however, SHA routinely evaluates process and areas for efficiency improvements. SHA monitors operating program spending very closely every month throughout the fiscal year and issues are immediately identified and addressed.

Chart 2.3.1: Percent of Operating Dollars Spent to Budget FY2012-FY2016



TANGIBLE RESULT #3

Provide a Safe and Secure Transportation Infrastructure



MDOT will not compromise on the commitment to continually improve the safety and security of customers and partners in everything we do.

RESULT DRIVER:

Sarah Clifford

Maryland Transportation Authority (MDTA)

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Cedric Ward State Highway Administration (SHA)

PURPOSE OF MEASURE:

To reduce fatalities in work zones.

FREQUENCY:

Annually (in July)

DATA COLLECTION METHODOLOGY:

Based on law enforcement reported crashes in designated work zones (and maintenance areas).

NATIONAL BENCHMARK:

"Toward Zero Deaths"

PERFORMANCE MEASURE SHA 3.1

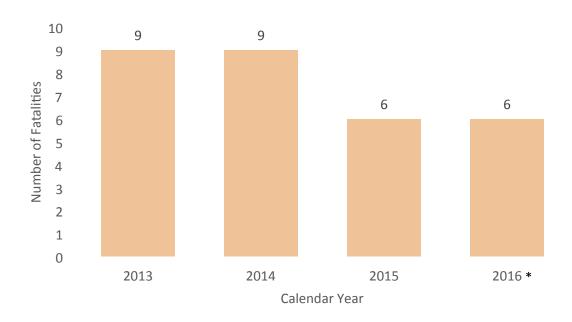
Annual Number of Temporary Traffic Control (TTC) Zone Traffic Fatalities on All Maryland Roads

Nationally, there were 700 fatalities in work zones in calendar year 2015. On average, four out of five people killed in work zones are motorists, not highway workers. The majority of work zone crashes occur during daylight hours and in the Baltimore and Washington DC metro areas. In calendar year 2016, six people lost their lives in Maryland work zone crashes, including one highway worker. Major contributing factors include: not paying attention, going too fast for conditions, failure to yield the right-ofway, and following too closely. In calendar year 2015, there were also six fatalities reported. Monitoring and reporting this performance measure annually demonstrates the effectiveness of statewide work zone safety efforts which include education, enforcement, and engineering. Training courses and outreach initiatives educate the workers and motorists. Work zone strategies are revised and implemented to best address specific needs and conditions while maintaining safety and mobility along the highways. Automated speed enforcement in work zones is used to change driver behavior.

PERFORMANCE MEASURE SHA 3.1

Annual Number of Temporary Traffic Control (TTC) Zone Traffic Fatalities on All Maryland Roads

Chart 3.1.1 Annual Number of Temporary Traffic Control Zone Traffic Fatalities on all Maryland Roads CY2013-CY2016

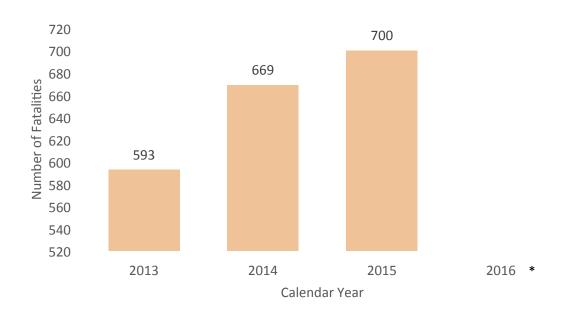


^{*}This number is based on preliminary data

PERFORMANCE MEASURE SHA 3.1

Annual Number of Temporary Traffic Control (TTC) Zone Traffic Fatalities on All Maryland Roads

Chart 3.1.2 Annual Number of Temporary Traffic Control Zone Traffic Fatalities on all National Roads CY2013-CY2015



^{*}National data for 2016 not available

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Russ Yurek/Sandi Sauter State Highway Administration (SHA)

PURPOSE OF MEASURE:

To determine percent of roadway lighting functioning because it is an important indication of safety and security along the roadways.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

Monthly assessment of lights to determine lit/unlit status through field observations (i.e., visual, windshield inspections).

NATIONAL BENCHMARK:

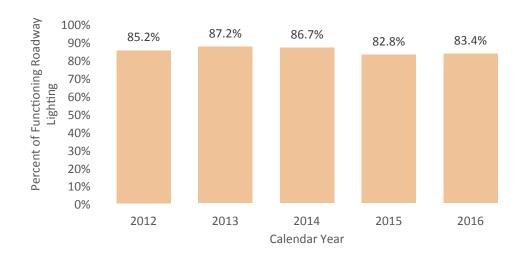
N/A

PERFORMANCE MEASURE SHA 3.2

Percent of SHA Roadway Lighting Functioning

Roadway lighting provides safety and security along the roadways. SHA strives to maintain a level of service (LOS) of 85 percent. The statewide LOS for CY 2016 was 83.4 percent and the five-year average is 85.1 percent. SHA is evaluating the highway lighting needs and has removed some unneeded lighting. SHA is continuing to remove unneeded lighting and implement the transition to LED lights. SHA is re-evaluating the monthly assessment and reporting to determine what is included and the value of the assessment. SHA increased contract authority by 20 percent for all maintenance contracts, including lighting, to work towards meeting the desired LOS.

Chart 3.2.1: Percent of Functioning SHA Roadway Lighting CY2012-CY2016



TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Russ Yurek/Sandi Sauter State Highway Administration (SHA)

PURPOSE OF MEASURE:

To determine percent of roadside with guardrail in acceptable condition.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

The Maryland Condition
Assessment Reporting System
(MCARS) team compares
actual maintenance condition
against desired maintenance
condition on a meets/does not
meet basis. The MCARS team
assesses the side of the road
assets every year by examining
each half-mile segment of
a sample of SHA half-mile
segments of roadway. This
examination includes a visual
assessment of any maintenance
assets in the area.

NATIONAL BENCHMARK:

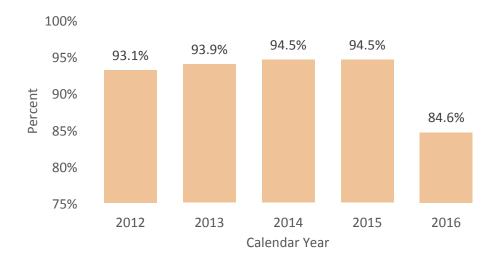
N/A

PERFORMANCE MEASURE SHA 3.3

Percent of Half-Mile Segments of Roadway with Guardrail in Acceptable Condition

Guardrails are a critical safety component on the roadway and, to maximize safety, must be in acceptable condition. SHA's desired level of service (LOS) is 90 percent of SHA guardrail acceptable at the time of assessment. The statewide LOS for CY 2016 was 84.6 percent. The five-year average is 92.1 percent. SHA reviews of a sample of half-mile roadway segments found 95 percent of all traffic barrier is functioning as intended. Functioning as intended is defined as all segments are standard height (27 +/- 3"), there are no missing or excessively loose posts, and minimal vehicle damage is present. SHA reviews guardrails continuously through physical inspections. SHA increased contract authority by 20 percent for all maintenance contracts, including guardrail, to work towards meeting the desired LOS.

Chart 3.3.1: Percent of Half-Mile Segments of Roadway with Guardrail in Acceptable Condition CY2012-CY2016



TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

John Thomas

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track annual trends related to illegal truck parking and determine where additional truck parking spaces would be feasible for design and construction within statewide facilities.

FREQUENCY:

Annually (in April)

DATA COLLECTION METHODOLOGY:

Annually identify locations where overnight truck parking occurs along the Maryland Statewide Truck Route System through the Maryland Freight Network Truck Parking Survey. Collect usage and overage information from observations and coordinate with MSP data on illegally parked trucks.

NATIONAL BENCHMARK:

National Priority

PERFORMANCE MEASURE SHA 3.4

Amount of Documented Illegal Truck Parking Along Maryland State Roadways

It is important to determine if sufficient and safe truck parking exists for Commercial Motor Vehicles (CMVs) to ensure that trucks park safely away from the roadway while getting their required rest. Past studies conducted by MDOT (CY 2005) determined the number of legal spaces for CMVs is insufficient. The Federal Highway Administration (FHWA) Jason's Law survey (CY 2014) found that truck parking is a major challenge in every state, and Maryland's I-95 Corridor section was among the most problematic areas in the nation. The shortage of legal truck parking results in high volumes of illegally parked CMVs at truck stops, rest areas, truck weigh and inspection stations, ramps, shoulders and other locations that may be prohibited to truck parking and has been a cause of serious accidents on Maryland's highways. Additionally, lack of parking is a challenge for drivers who must maintain hours of service regulations but have no place to park near where they need to deliver. This presents safety, economic and congestion issues.

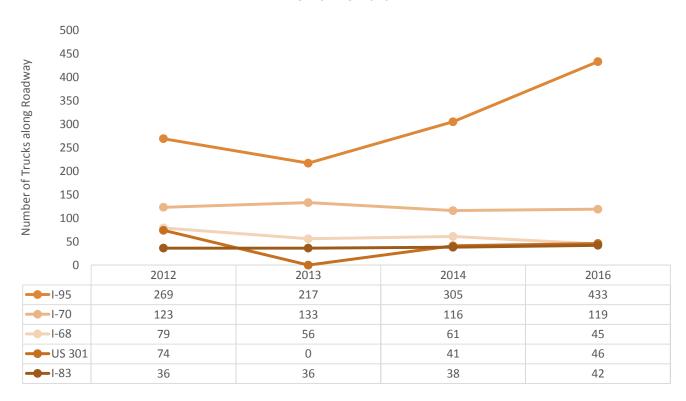
With the passage of The Moving Ahead for Progress in the 21st Century (MAP-21), Jason's Law was established by the U.S. Department of Transportation's (DOT) FHWA to make the shortage of truck parking a national priority. Jason's Law specifies that the USDOT perform three main tasks as part of a survey and comparative assessment: 1) evaluate State capacity to provide adequate truck parking; 2) assess truck volumes in each State and 3) develop a system of metrics to measure parking in each State. FHWA collected truck parking information from each state in CY 2014, and FHWA requires states to submit truck parking information routinely under this law.

The Maryland Freight Strategic Plan was developed in CY 2012 to address the anticipated increase in truck traffic on the statewide freight roadway network. This plan included Annual Overnight Truck Parking counts, which have been conducted since CY 2012. Over the past three years, the annual Maryland Freight Network Truck Parking Survey was used to identify baseline conditions and track trends related to illegal truck parking on the Maryland Truck Route system. The top five high volume locations have consistently included I-95, I-70 and I-68 along with US 301, I-83 and I-270 varying within the list over the last 3 years. The CY 2015 parking analysis is underway and provides usage information to determine the statewide parking availability including public and private facility truck parking spaces.

PERFORMANCE MEASURE SHA 3.4

Amount of Documented Illegal Truck Parking Along Maryland State Roadways

Chart 3.4.1: Amount of Documented Illegal Truck Parking along Selected Maryland State Roadway Corridors, CY2012-CY2016



TANGIBLE RESULT #4

Deliver Transportation Solutions and Services of Great Value



MDOT will deliver transportation solutions on time and within budget. We will use strategies to ensure that the transportation solution meets the needs of customers and eliminates unnecessary costs.

RESULT DRIVER:

Jason Ridgway State Highway Administration (SHA)

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Eric Marabello State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track on-time performance of project advertisement date for construction contract procurement.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Monthly advertisement date reporting publication/advertisement date collected manually using SHA's project database.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE SHA 4.1

Percent of Projects (Valued at More Than \$1 Million) Advertised Within 30 Days of the Original Established Financial Advertisement Schedule Date

On time project delivery is critically important to SHA, customers, contractors and users. The Administration can properly manage project budgets and issue the appropriate funds which will allow for better prediction of funding for future projects. The contracting community is responsible for implementation of public commitments on projects and a predictable advertisement schedule is important for contractors to establish resource needs to compete for and complete construction of these projects. Timely advertisement of projects also puts roadway users in a better position to reliably predict the impacts of the construction and make necessary business or personal decisions.

For the current reporting period (January 1, 2017 through March 31, 2017), SHA is at 74 percent and trending down. The goal for this project is 90 percent

Review of data from SHA measure 4.2 (Bid Opening) identified that completeness of contract documents at advertisement have a direct correlation to an on-time bid opening. It is expected that this measure will continue to trend down until revisions are made to the project deliverables. Starting January 1, 2017, a requirement to have permits in-hand or at least substantially complete at advertisement was applied to projects resulting in downward trend to SHA 4.1. As design schedules are adjusted to meet this requirement, it is anticipated that this measure will start to trend up toward the goal.

The efforts taking place now are the following:

- Identifying reasons for advertisement slips.
- Better identification of needed documents for advertisement submittals.
- Revised project development milestones to ensure common issues for delaying advertisements are being addressed at the correct milestone.
- Identifying advertisement date only after 30 percent completion of design with SWM/ESC Concept Development approval.

PERFORMANCE MEASURE SHA 4.1

Percent of Projects (Valued at More Than \$1 Million) Advertised Within 30 Days of the Original Established Financial Advertisement Schedule Date



Chart SHA 4.1.1 Advertisement within 30 Days FY2015-FY2017



TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Eric Marabello State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track on-time performance of project bid opening date for construction contract procurement.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Monthly advertisement data collected using SHA project and procurement database.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE SHA 4.2

Percent of Projects (Valued at More Than \$1 Million) with a Bid Opening Date on Target with the Bid Opening Date at the Time of Actual Advertisement Date

On time bid opening is critically important to SHA, customers, contractors and users. The Administration can properly manage project budgets and issue the appropriate funds which will allow for better prediction of funding for future projects and identify the need for construction resources. The contracting community, responsible for implementation of our public commitments, relies on predictable bid opening to establish resource needs to complete construction on time. Users benefit from on time bid opening to ensure that projects are completed on time.

For the current reporting period (January 1, 2017 through March 31, 2017), SHA is at 62 percent and trending down. The goal for this project is 90 percent. It should be noted that 4 projects were delayed because of state shutdown for weather and bid opening was not held on time. Removing these projects from the measure would increase SHA's measure to 71 percent on time.

This measure is directly affected by the completeness of documents at advertisement. When documents are incomplete at advertisement, the bid opening date will likely slip. Starting January 1, 2017, projects did not open bids without approved or substantially complete permits. Projects opening bids without approved permits lead to delayed construction start, impacting the travelling public and increasing construction costs.

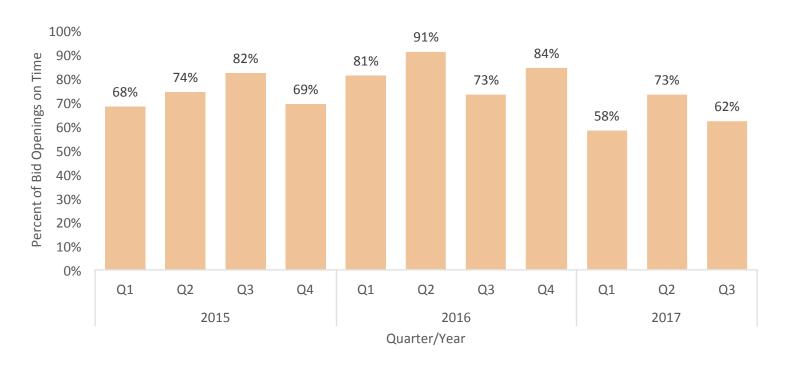
The efforts taking place now are the following:

- Identifying and documenting reasons for bid slips.
- Advertisements are not moving forward without permits (affecting SHA 4.1).
- Revised project development milestones to ensure common issues for delaying advertisements are being addressed at the correct milestone.

PERFORMANCE MEASURE SHA 4.2

Percent of Projects (Valued at More Than \$1 Million) with a Bid Opening Date on Target with the Bid Opening Date at the Time of Actual Advertisement Date

Chart SHA 4.2.1 Bid Openings on Time FY2015-FY2017



TANGIBLE RESULT #5

Provide an Efficient, Well-Connected Transportation Experience



MDOT will provide an easy, reliable transportation experience throughout the system. This includes good connections and world class transportation facilities and services.

RESULT DRIVER:

Phil Sullivan

Maryland Transit Administration (MTA)

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Cedric Ward

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To ensure that highway signs meet the minimum level of retroreflectivity established in the MUTCD.

FREQUENCY:

Annually (TBD)

DATA COLLECTION METHODOLOGY:

Yearly nighttime retroreflectivity evaluation.

NATIONAL BENCHMARK:

UNDER DEVELOPMENT.
Minimum levels of reflectivity published in the MUTCD.

PERFORMANCE MEASURE SHA 5.3

Percent of SHA Signs Functioning (Reflectivity)

Maintaining retroreflectivity levels is a new FHWA requirement. The minimum levels are published in the Manual on Uniform Traffic Control Devices (MUTCD). Retroreflectivity evaluation is a new program for SHA and there is no data to indicate the performance trend. SHA is in the final stages of developing a statewide contract to evaluate signs to ensure that they meet the federal requirements.



TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Russ Yurek/Sandi Sauter State Highway Administration (SHA)

PURPOSE OF MEASURE:

To determine percent of roadways along half-mile segments with acceptable line striping because it is an important component of providing a reliable and efficient roadway. Acceptable line striping is defined as the following: In any half-mile segment of a sample of SHA half-mile segments of roadway, 90 percent of the striped lines are functioning as intended. Functioning as intended is defined as intact, visible with minimal fading and/or chipping, and providing clear delineation of travel lanes at posted speed.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

MCARS team compares actual maintenance condition against desired maintenance condition on a meets/ does not meet basis. The MCARS team assesses the side of the road assets every year by examining each half-mile segment of a sample of SHA half-mile segments of roadway. This examination includes a visual assessment of any maintenance assets in the area.

NATIONAL BENCHMARK:

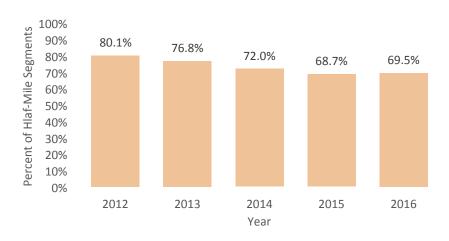
N/A

PERFORMANCE MEASURE SHA 5.4

Percent of Half-Mile Segments of Roadway with Line Striping in Acceptable Condition

Line striping is an important component of providing a reliable and efficient roadway network. Line striping, along with other traffic control components such as pavement markings and signs, provides clear delineation of the travel portion of the roadway, which is essential for the safe passage of SHA's customers. SHA's desired level of service (LOS) is 98 percent of line striping acceptable at the time of the assessment. The statewide LOS for CY 2016 was 69.5 percent. The five-year average is 73.4 percent. The performance trend has been on a decline for the past five years with only a slight increase over the past year. SHA reviews of sample half-mile segments found 90 percent of the striped lines are functioning as intended. Functioning as intended is defined as intact, visible with minimal fading and/or chipping, and providing clear delineation of travel lanes at posted speed. A new line-striping policy has been developed and reviewed with maintenance managers, which allows the retracing of failing thermoplastic lines with latex paint to maintain reflectivity and increase level of service. SHA is also piloting other material types and methods for line striping. In addition, SHA increased contract authority by 20 percent for all maintenance contracts, including line striping, to work towards meeting the desired LOS.

Chart 5.4.1: Percent of Half-Mile Segments of Roadway with Line Striping in Acceptable Condition CY2012-CY2016



TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Russ Yurek/Sandi Sauter State Highway Administration (SHA)

PURPOSE OF MEASURE:

Determine percent of roadways in half mile segments with acceptable pavement markings because it is an important component of providing a reliable and efficient roadway. Acceptable markings are those that function as intended. Functioning as intended is defined as 75% of each individual marking (90% for railroad and school crossings) is intact with minimal fading.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

MCARS team compares actual maintenance condition against desired maintenance condition on a meets/does not meet basis. The MCARS team assesses the side of the road assets every year by examining each half-mile segment of a sample of SHA half-mile segments of roadway. This examination includes a visual assessment of any maintenance assets in the area.

NATIONAL BENCHMARK:

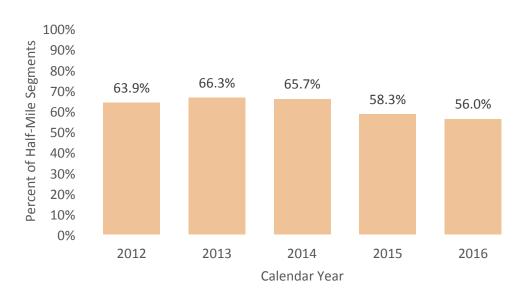
N/A

PERFORMANCE MEASURE SHA 5.5

Percent of Half-Mile Segments of Roadway with Pavement Markings in Acceptable Condition

Pavement markings are an important component of providing a reliable and efficient roadway network. Pavement markings, along with other traffic control components such as line striping and signs, provide clear delineation of the travel portion of the roadway, which is essential for the safe passage of SHA's customers. SHA's desired level of service (LOS) is 80 percent of SHA pavement markings (not line striping, which is addressed in a different measure) acceptable at the time of assessment. The statewide LOS for calendar year 2016 was 56 percent. The five-year average is 62 percent. The performance trend has been on a decline for the past three years. SHA reviews of a sample of half-mile segments of roadway found pavement markings are functioning as intended. Functioning as intended is defined as 75 percent of each individual marking (90 percent for railroad and school crossings) intact with minimal fading. SHA increased contract authority for all maintenance contracts, including pavement markings, to work towards meeting the desired LOS.

Chart 5.5.1: Percent of Half-Mile Segments of Roadway with Pavement Markings in Acceptable Condition CY2012-CY2016



TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Russ Yurek/Sandi Sauter State Highway Administration (SHA)

PURPOSE OF MEASURE:

To determine the percent of SHA highway network in preferred maintenance condition because the overall condition of the network reflects how well the traveling public is provided with a quality roadway in Maryland.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

MCARS team compares actual maintenance condition against desired maintenance condition on a meets/does not meet basis. The MCARS team assesses the side of the road assets every year by examining each half-mile segment of a sample of SHA half-mile segments of roadway. This examination includes a visual assessment of any maintenance assets in the area.

NATIONAL BENCHMARK:

There is not a known national industry benchmark.

PERFORMANCE MEASURE SHA 5.6

Percent of the Maryland SHA Network in Overall Preferred Maintenance Condition

Maryland citizens require a safe, high quality and operational transportation network. Maintaining and improving the level of service is important to meet this requirement. The overall preferred maintenance condition gives the customers a sense of how well SHA has been able to maintain assets given the available resources at SHA's disposal. The SHA's desired level of service (LOS) is 84 percent of the Maryland SHA network in overall preferred maintenance condition at the time of assessment. The statewide LOS for calendar year 2016 was 78.6 percent, and the performance trend shows a slight decline in LOS over the last five years. SHA increased contract authority for all maintenance contracts by 20 percent in order to work towards meeting the desired LOS.

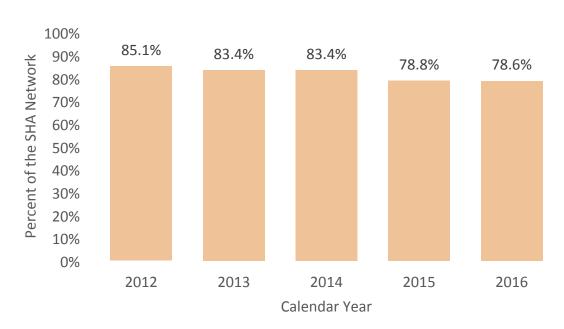


Provide an Efficient, Well-Connected Transportation Experience

PERFORMANCE MEASURE SHA 5.6

Percent of the Maryland SHA Network in Overall Preferred Maintenance Condition

Chart 5.6.1: Percent of the Maryland SHA Network in Overall Preferred Maintenance Condition CY2012-CY2016



Be Fair and Reasonable to Our Partners



MDOT will provide an easy, reliable procurement experience throughout the system.

RESULT DRIVER:

Wanda Dade State Highway Administration (SHA)

Be Fair and Reasonable to Our Partners

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Eric Lomboy State Highway Administration (SHA)

PURPOSE OF MEASURE:

To decrease the time it takes to complete A/E services contracts and develop a more efficient procurement process.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

A/E contract tracking database under development.

NATIONAL BENCHMARK:

TBD

PERFORMANCE MEASURE SHA 7.1

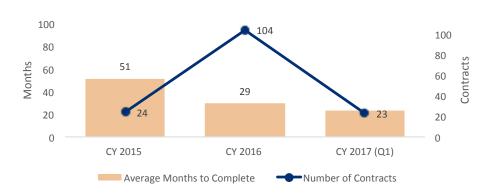
Time to Complete Architectural and Engineering (A&E) Services Contracts

The A&E services contract procurement process is greatly influenced by procurement law. In February 2016, Governor Larry Hogan established the Commission to Modernize State Procurement. The Commission's final report to the Governor was released in December 2016. A number of changes have been proposed in the 2017 Legislative session, many of which would directly impact SHA's A&E procurement process.

SHA procures the most A&E services contracts of all the MDOT TBUs. SHA undertook a comprehensive review of the procurement process, which resulted in substantial delays in completing the procurement timeline and created a backlog of procurements. SHA has been diligently working through the backlog, and as of April-May of 2017, have cleared the backlog of well over a hundred contracts.

SHA continues to produce an A&E Contract Advertisement Schedule with deadlines that capture the progress of every A&E procurement. This has been an invaluable tool in helping to monitor and track the progress of all active A&E procurements. SHA is also continuing to review its business processes to implement additional streamlining where possible, and now that the results of the new legislation are known, we intend to make the necessary adjustments to our processes which should aid in further reducing the length of time it takes to complete an A&E procurement.

Chart SHA 7.1.1 Average Months to Complete A&E Procurements CY2015-CY2017



Be a Good Neighbor



As the owner of statewide transportation facilities, MDOT must work with neighbors to find solutions that work for customers and are sensitive to neighbors.

RESULT DRIVER:

Simon Taylor

Maryland Aviation Administration (MAA)

Be a Good Neighbor

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Russ Yurek/Sandi Sauter State Highway Administration (SHA)

PURPOSE OF MEASURE:

To determine percent of roadways with acceptable litter levels as an indicator of providing acceptable facilities.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

MCARS team compares actual maintenance condition against desired maintenance condition on a meets/does not meet basis. The MCARS team assesses the side of the road assets every year by examining each half-mile segment of a sample of SHA half-mile segments of roadway. This examination includes a visual assessment of any maintenance assets in the area.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE SHA 8.1

Percent of Half-Mile Segments of Roadway with Acceptable Litter Levels

The roadside policy of SHA is influenced by the atitudes of the traveling public. Based on customer satisfaction surveys, SHA's customers have repeatedly focused on the attractiveness of SHA's roadsides. An attractive roadside conveys a sense of pride in the state, protection of the environment and natural resources, and displays a sense of a healthy and thriving community.

SHA's desired level of service (LOS) is 70 percent of SHA roadside miles have acceptable litter levels at the time of assessment. The statewide LOS for CY 2016 was 86.7 percent. The statewide LOS has consistently been above SHA's desired LOS for the past five years. SHA reviews of sample half-mile segments found there are fewer than 50 pieces of fist-sized litter observed on interstate or primary segments; litter on secondary segments; fewer than 25 pieces of fist-sized; and 95 percent of the traveled roadway is free of manmade materials that unintentionally fell from vehicles.

Chart 8.1.1 Percent of Half-Mile Segments of Roadway with Acceptable Litter Levels, 2012-2016



Be a Good Neighbor

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Russ Yurek/Sandi Sauter State Highway Administration (SHA)

PURPOSE OF MEASURE:

To determine percent of roadway in half mile segments with acceptable mowing as an indicator of a neat, acceptable roadway.

FREQUENCY:

Annually (in January)

DATA COLLECTION METHODOLOGY:

MCARS team compares actual maintenance condition against desired maintenance condition on a meets/does not meet basis. The MCARS team assesses the side of the road asset every year by examining each half-mile segment of a sample of SHA half-mile segments of roadway. This examination includes a visual assessment of any maintenance assets in the area.

NATIONAL BENCHMARK:

N/A

PERFORMANCE MEASURE SHA 8.2

Percent of Half-Mile Segments of Roadway with Acceptable Mowing

The roadside policy of SHA is influenced by the attitudes of the traveling public. Based on customer satisfaction surveys, SHA's customers have repeatedly focused on the attractiveness of SHA's roadsides. An attractive roadside conveys a sense of pride in the state, protection of the environment and natural resources, and displays a sense of healthy and thriving community. SHA's desired level of service (LOS) is 70 percent of SHA roadside miles have acceptable mowing at the time of assessment. The statewide LOS for CY2016 was 81.6 percent. The statewide LOS has consistently been above SHA's desired LOS for the past five years. SHA reviews of sample half-mile segments found mowing is performed based on the latest mowing guidelines, which is presently 16" grass height or less, and is aesthetically pleasing and provides safe sight distances. Aesthetically pleasing is defined as uniform height with minimal noticeable weed growth.



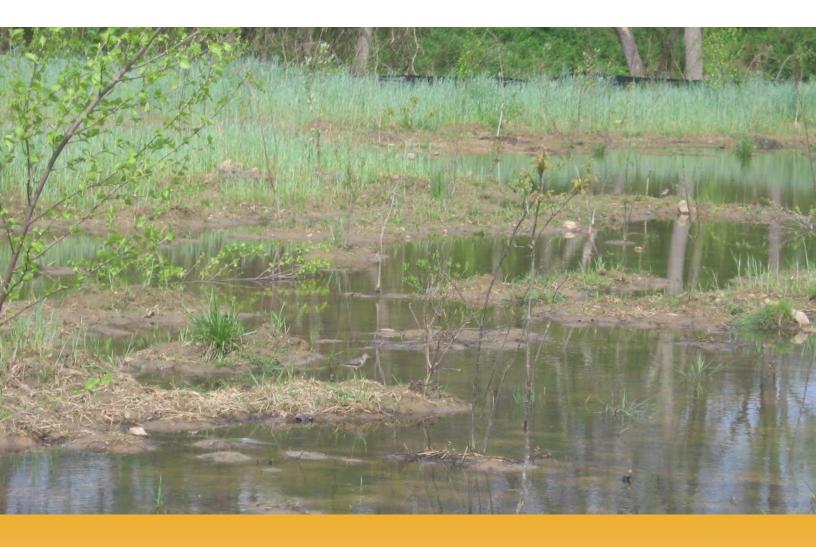
PERFORMANCE MEASURE SHA 8.2

Percent of Half-Mile Segments of Roadway with Acceptable Mowing

Chart 8.2.1 Percent of Half-Mile Segments of Roadway with Acceptable Mowing CY2012-CY2015



Be a Good Steward of Our Environment



MDOT will be accountable to customers for the wise use of limited resources and impacts on the environment when designing, building, operating and maintaining a transportation system.

RESULT DRIVER:

Dorothy Morrison
The Secretary's Office (TSO)

Be a Good Steward of Our Environment

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Sonal Ram

State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track progress towards reducing the SHA system's stormwater impacts on Maryland's waterways as part of the Bay Restoration Effort.

FREQUENCY:

Annually (in October)

DATA COLLECTION METHODOLOGY: Actual acreage calculations.

NATIONAL BENCHMARK:

N/A

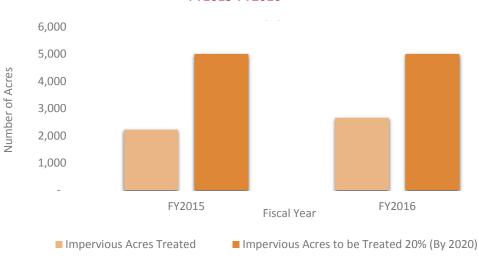
PERFORMANCE MEASURE SHA 9.1

Percent of Impervious Restoration Completed Annually

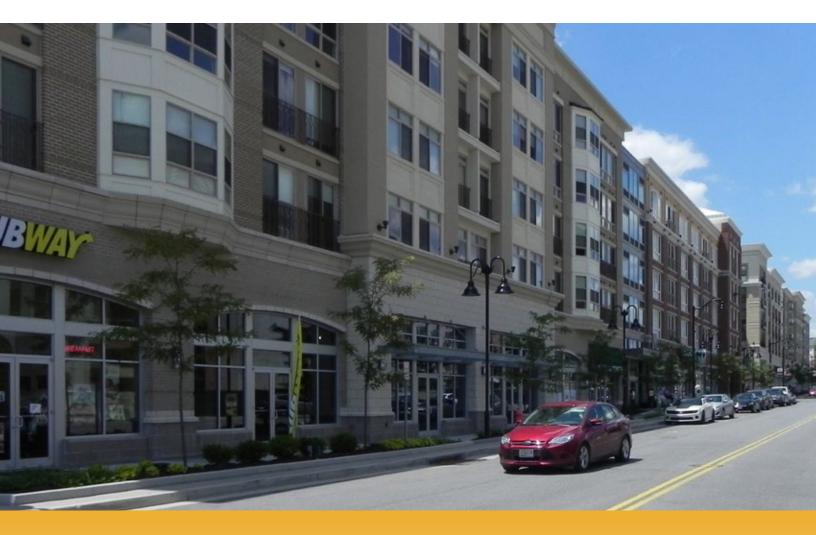
Maryland citizens require a thriving, clean and healthy environment. Addressing stormwater issues is critical to preserving the ecosystem. SHA stormwater discharge is regulated under its National Pollutant Discharge Elimination System - separate Municipal Storm Sewer System (NPDES-MS4) Permit. As part of the State's Watershed Implementation Plan in response to the Bay Total Maximum Daily Load (TMDL) imposed by the Clean Water Act, that permit now contains a requirement that 20 percent of its impervious surface be restored. Restoration activities include stream restoration, stormwater management, outfall upgrades, tree planting, and street sweeping. One-year deadlines are set at permit issuance for an accounting baseline and the computation of the 20 percent restoration requirement. Performance data will indicate acres restored through the permit expiration in October 2020.

SHA is on track to deliver compliance requirements with its National Pollutant Discharge Elimination System - Municipal Separate Storm Sewer System (NPDES-MS4) permit for stormwater discharge. SHA is addressing impervious acres every year and projects to be able to be compliant.

Chart 9.1.1: Amount of Impervious Restoration Completed Annually FY2015-FY2016



Facilitate Economic Opportunity in Maryland



Maryland's transportation system is essential to the State's economy. An efficient transportation system provides a competitive advantage to businesses in a regional, national and global marketplace. Transportation directly impacts the viability of a region as a place where people want to live, work and raise families, all critical to attracting a competent workforce.

RESULT DRIVER:

Jim Dwyer

Maryland Port Administration (MPA)

Facilitate Economic Opportunity in Maryland

TBU COORDINATOR:

Scott Pomento
State Highway Administration (SHA)

PERFORMANCE MEASURE DRIVER:

Dave Czorapinski State Highway Administration (SHA)

PURPOSE OF MEASURE:

To track the number of days to issue a superload hauling permit in the Maryland One hauling permit system.

FREQUENCY:

Quarterly

DATA COLLECTION METHODOLOGY:

Applications are entered, processed and tracked in the Maryland One hauling permit system.

NATIONAL BENCHMARK:

Surrounding states/competitive ports.

PERFORMANCE MEASURE SHA 10.1

Number of Qualifying Superload Permits Up to and including 200,000 Pounds Issued Within Two Business Days of Receiving a Correct Application in the Maryland One Hauling Permit System

Hauling permits allow customers to move loads that would otherwise exceed the legal size and weight limits, and provide general, route, and holiday restrictions as well as information specific to the move (such as crawl speeds if applicable, travel times, regulations) that maximize their safety and the safety of others on the highway. The Maryland One System provides a one stop shop for multi-jurisdictional permits processing all oversize overweight permits for the State of Maryland, including all Baltimore City permits. An average of 500 oversize/ overweight loads travel on Maryland roadways each day on hauling permits issued by SHA along with Baltimore City Department of Transportation. With nearly 150,000 hauling permits processed annually, it is important that they are reviewed quickly and accurately to ensure safe passage.

Loads up to and including 150,000 pounds are auto-issued by the Maryland One System. Loads exceeding 150,000 pounds currently require manual engineering review, but can be processed more timely now that auto-issued loads receive a system-generated engineering analysis. Recognizing that engineering reviews become more complex as load weight increases, the ability to process loads up to 200,000 pounds in two business days is the goal for applications that are correctly submitted and need no extraordinary engineering considerations. Safety, efficiency and customer service prosper as Maryland One keeps customers moving in and through Maryland. The Maryland One system went live in late May 2016. Maryland One is currently auto-issuing permits up to and including loads meeting thresholds of 150k, 12' wide, 14'6" high, and 90' long. Any permit that is auto issued by this system up to the predetermined thresholds will not incur engineering fees as long as the route analysis passes evaluation. This system issues multijurisdictional permits and encompasses bridge analysis from SHA and MDTA. As the system grows, SHA will continue to review processes, procedures and meet with stakeholders to look for ways to improve program functionality. SHA MCD is implementing new features such as CVIEW which will provide information on carriers that have been flagged by FMCSA for out of service conditions or inactive status prior to issuance of permits. SHA is also adding functionality for tracking of escorts for all jurisdictions.

Facilitate Economic Opportunity in Maryland

PERFORMANCE MEASURE SHA 10.1

Number of Qualifying Superload Permits
Up to and including 200,000 Pounds Issued Within Two Business Days of Receiving a Correct Application in the Maryland One Hauling Permit System

The importance of this measure is that it establishes tangible benchmarks by which to measure increases in program efficiency that equate to reduction in operating costs to industry and also provides for tracking of application processing time. This measure affects safety of the motoring public, citizens, preservation of highway infrastructure and commerce which travels throughout the state and Ports.

91.3%

80%

60%

58.0%

40%

20%

Total Issued*

< 2 hr < 4 hr < 2 days > 5 days

Chart SHA 10.1.1 Qualifying Superload Permits Issued June 2016-May 2017

^{*5,395} Issued Superloads Permits between June1, 2016 and May 31,

All Electronic Tolling (AET) – Collection of tolls at highway speeds using *E-ZPass* transponders or video tolling; no toll booths or cash collection.

Annual Attainment Report on Transportation System
Performance – Pursuant to Transportation Article Section
2-103.1 of the Annotated Code of Maryland, the State is
required to develop or update an annual performance
report on the attainment of transportation goals and
benchmarks in the Maryland Transportation Plan (MTP)
and Consolidated Transportation Program (CTP). The
Attainment Report must be presented annually to
the Governor and General Assembly before they may
consider the MTP and CTP.

Calendar Year (CY) – The period of 12 months beginning January 1 and ending December 31 of each reporting year.

Coordinated Highways Action Response Team (CHART)

 CHART is an incident management system aimed at improving real-time travel conditions on Maryland's highway system. CHART is a joint effort of the State Highway Administration, Maryland Transportation Authority and the Maryland State Police, in cooperation with other federal, state and local agencies.

Consolidated Transportation Program (CTP) -

A six-year program of capital projects, which is updated annually to add new projects and reflect changes in financial commitments.

Fiscal Year (FY) – A yearly accounting period covering the time frame between July 1 and June 30 of each reporting year.

MPA General Cargo – Foreign and domestic waterborne general cargo handled at the public (MPA) terminals.

Port of Baltimore Foreign Cargo – International (Foreign) cargo handled at public and private terminals within the Baltimore Port District. This includes bulk cargo (e.g., coal, sugar, petroleum, ore, etc. shipped in bulk) and all general cargo (e.g., miscellaneous goods shipped in various packaging).

MAA – Maryland Aviation Administration operates Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) and Martin State Airport, a general aviation/reliever airport northeast of Baltimore.

MDTA – Maryland Transportation Authority operates and maintains the State's eight toll facilities.

Mode - Form of transportation used to move people or cargo (e.g., truck, rail, air).

MPA – Maryland Port Administration promotes the Port of Baltimore as a leading east coast hub for cargo and cruise activity.

MTA – Maryland Transit Administration provides Local Bus, Light Rail, Metro Rail, Paratransit services and regional services through commuter rail (MARC) and Commuter Bus, as well as grant funding and technical assistance.

MVA – Motor Vehicle Administration serves as the gateway to Maryland's transportation infrastructure, providing a host of services for drivers and vehicles, including registration, licensing and highway safety initiatives.

SHA – State Highway Administration manages the State's highway system which includes 17,117 lane miles of roads and 2,564 bridges

TBU – Transportation Business Unit

TSO – The Secretary's Office

Vehicle Miles of Travel (VMT) – A measurement of the total miles traveled by all vehicles.



Boyd K. Rutherford Lt. Governor



Larry Hogan Governor



Pete K. Rahn Secretary of Transportation

MARYLAND DEPARTMENT OF TRANSPORTATION.

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This document can be found at www.mdot.maryland.gov/MDOTExcellerator and is available in alternative formats upon request.

